

**A SYSTEM AND METHOD FOR STEREO CONFERENCING OVER LOW-  
BANDWIDTH LINKS**

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**ABSTRACT OF THE DISCLOSURE**

Systems and methods are disclosed for packet voice conferencing. An encoding system accepts two sound field signals, representing the same sound field sampled at two spatially-separated points. The relative delay between the two sound field signals is detected over a given time interval. The sound field signals are combined and then encoded as a single audio signal, e.g., by a method suitable for monophonic VoIP. The encoded audio payload and the relative delay are placed in one or more packets and sent to a decoding device via the packet network.

The decoding device uses the relative delay to drive a playout splitter—once the encoded audio payload has been decoded, the playout splitter creates multiple presentation channels by inserting the transmitted relative delay in the decoded signal for one (or more) of the presentation channels. The listener thus perceives a speaker's voice as originating from a location related to the speaker's physical position at the other end of the conference. An advantage of these embodiments is that a pseudo-stereo conference can be conducted with virtually the same bandwidth as a monophonic conference.

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